

AMENDMENTS TO THE CLAIMS

In the claims:

1-67. (Canceled)

68. (Currently Amended) A method for producing a cultured tissue construct, comprising,

(a) seeding human fibroblast cells capable of synthesizing an extracellular matrix on a porous membrane, wherein the membrane comprises pores that are about 3 microns or less in size, in a culture vessel in a chemically defined cell culture medium, wherein the chemically defined cell culture medium is free of undefined animal organ or tissue extracts and comprises at least one component selected from the group consisting of: insulin, insulin-like growth factors, transferrin, ascorbate, and ascorbate derivatives at about 80% to about 100% confluence;

(b) stimulating the fibroblast cells to synthesize, secrete and organize extracellular matrix components; and,

(c) continued culturing of the fibroblast cells until the cells form a layer of synthesized extracellular matrix of at least about 30 microns thick, with the cultured fibroblast cells contained within the synthesized extracellular matrix layer, wherein the extracellular matrix comprises:

- (i) fibrillar collagen showing a packing organization of fibrils and fibril bundles exhibiting a quarter-staggered 67 nm banding pattern;
- (ii) tenascin; and,
- (iii) glycosaminoglycans;

and wherein said extracellular matrix is produced by the cultured fibroblast cells on one surface of [[a]] the porous membrane in the absence of exogenous matrix components during the culturing conditions.

69-71. (Canceled)

72. (New) The method of claim 68, wherein the human dermal fibroblast cells are seeded at about 80% to about 100% confluence.

73. (New) The method of claim 68, wherein the human fibroblast cells are dermal cells.

74. (New) The method of claim 68, wherein the ascorbate derivative is selected from the group consisting of sodium ascorbate, ascorbic acid or a derivative thereof.

75. (New) The product of the method of claim 68, wherein the cultured tissue construct is free of undefined animal organ or tissue extracts.